

**Proposed Amendments to the Fleet Rule for Transit Agencies, including New Rules
for Transit Fleet Vehicles (Non-Urban Buses)**

The Fleet Rule for Transit Agencies applies to transit agencies with urban buses (and the urban buses operated by those transit agencies). This proposal suggests new rules for buses and vehicles other than urban buses that are owned or operated by transit agencies. In addition, this proposal also add language for a newly formed transit agency, a modification to the particulate matter (PM) emission requirements for urban buses to allow for fleet growth, and various additional clarifying changes. One of these clarifying changes is a proposal to relocate the Fleet Rule for Transit Agencies to regulation sections that have been set aside for diesel PM control measures for in-use vehicles. Language highlighted represents modifications from the May 17, 2004, workshop version.

New Sections for the Fleet Rule for Transit Agencies:

We propose to relocate the Fleet Rule for Transit Agencies from sections 1956.2 through 1956.4, title 13, California Code of Regulations (13 CCR) to section 2023, 13 CCR. The Air Resources Board (ARB) has designated sections 2020 through 2027, 13 CCR, for diesel PM control measures for in-use vehicles. Staff believes that this rule is more appropriately located in these sections than in the current location, which houses rules primarily concerned with engine exhaust standards for new vehicles. Staff proposes to leave section 1956.1, 13 CCR, in its current location with the other engine exhaust emission standards.

The new proposed sections will be organized as follows:

Section 2023: definitions and requirements pertinent to both urban bus and other transit fleet vehicle engines that are currently in section 1956.2 (b), along with general requirements for new transit agencies in (c) and some of the waivers and general requirements in (d) through (f);

Section 2023.1: remaining 1956.2 requirements;

Section 2023.2: the new transit fleet vehicle requirements;

Section 2023.3: requirements currently in section 1956.3, the zero-emission bus requirements; and

Section 2023.4: record keeping requirements currently in section 1956.4, plus new reporting requirements necessitated by the proposed amendments.

Proposed Modifications to the Purpose and Definitions of Diesel Particulate Matter Control Measures:

The definitions in section 2020 are applicable to the fleet rule for transit agencies. Because of this, the definition of “alternative fuel” will be deleted from the Fleet Rule for Transit Agencies as it is located in section 2020 [July 20, 2004]. For clarity, staff proposes moving the definition of “transit agency” to section 2020. Owners will be able to distinguish between public agency-owned vehicles and transit agency-owned vehicle more easily through this change.

Proposed Modifications to the Fleet Rule for Transit Agencies:

~~Strikethrough~~ is used for the deletion of previously adopted language. Underline is used for addition of new language. Language without underline or strikethrough is previously adopted language that is moved to a new section. Language in *italics* was adopted by ARB on June 24, 2004 – not all the language is included. For the complete adopted language to be considered by the ARB on June 24, 2004, go to www.arb.ca.gov/regact/bus03/bus03.htm.

2023 Fleet Rule for Transit Agencies

(a) **Definitions:** For the purposes of the fleet rule specified in sections 2023 through 2023.4, the following definitions apply. In addition, the definitions in section 2020 also apply:

(1) ~~“Alternative fuel”~~

(2) ~~“Active fleet”~~ [No change]

“Commuter Service Bus” means a passenger-carrying vehicle powered by a heavy heavy-duty diesel engine or of a type normally powered by a heavy heavy-duty diesel engine that is not otherwise an urban bus and which operates on a fixed route primarily during peak commute hours, that does not allow for passenger-initiated stops, that has no more than five stops per scheduled route and two round trips scheduled per day to and from the same destinations, and that operates a one way schedule in the morning and a one way schedule in the opposite direction in the afternoon or evening.

(3) ~~“Emergency contingency vehicle”~~ [No change]

(4) ~~“Heavy-duty pilot ignition engine”~~ [No change]

(5) *“Hybrid-electric bus” means an urban bus equipped with at least two sources of energy on board; this energy is converted to motive power using electric drive motors and an auxiliary power unit, which converts consumable fuel*

energy into mechanical or electrical energy. The electric drive motors must be used partially or fully to drive the vehicle's wheels.

"New Service Area" means a collection of routes operated by a transit agency not previously operated by an existing or previously existing transit agency. The new service area would not contain service operated by an existing transit agency or be added service to an existing service area.

~~(6)~~ "Spare bus" [No change]

~~(7)~~ "Transit agency" [Move to section 2020]

"Transit Fleet" means the total of a transit agency's of urban buses and transit fleet vehicles, excluding emergency contingency vehicles.

"Transit Fleet Vehicle" means a vehicle greater than 8,500 gross vehicle weight, powered by a heavy-duty diesel engine or of a type normally powered by a heavy-duty diesel engine, owned or operated by a transit agency, and which is not an urban bus. A commuter service bus is a transit fleet vehicle.

~~(8)~~ "Urban bus" [No change]

(b) A new transit agency established January 1, 2005, or later shall notify the Executive Officer in writing of its existence and shall comply with all applicable requirements of section 2023. In addition the new transit agency shall:

(1) Choose a compliance path for its active fleet and notify the Executive Officer within 120 days of formation of its intent to follow either the diesel path or the alternative fuel path, as described in section 2023.1 (a), except that a new transit agency that is a successor to an existing transit agency shall follow the compliance path and adopt the PM baseline of the transit agency out of which it has been formed; and

(2) Submit reports to the Executive Officer as required in section 2023.4.

(These sections from 1956.2 will apply to the new transit fleet vehicle requirements but have not changed, except where noted, from 1956.2)

~~1956.2 (f)(8)~~ 2023(c) A transit agency that installs a diesel emission control strategy to reduce diesel PM shall use a diesel emission control strategy that is verified by the Executive Officer in accordance with section 2700 et seq., title 13, CCR, or an urban bus retrofit device that has been exempted under Vehicle Code section 27156 as an engine rebuild kit and that reduces PM to 0.10 g/bhp-hr when used on an engine model 6V92TA DDEC for the model years specified for that engine.

~~1956.2 (f)(9)~~ 2023(d) A transit agency that installs a diesel emission control strategy on an ~~urban bus~~ engine shall use the following percentage reductions from the engine certification standard value when calculating its total diesel PM emissions: 25 percent for a Level 1, 50 percent for a Level 2, and 85 percent for a Level 3 diesel emission control strategy.

~~1956.2 (g)~~ 2023(e) A transit agency with fewer than 20 buses in its ~~bus transit fleet~~ may apply for an extension to comply with the provisions of section ~~1956.2~~ 2023.1 and section 2023.2 by submitting documentation of financial hardship to the Executive Officer, in writing, at least thirty (30) days before the requirement becomes applicable for approval by the Executive Officer. Documentation of financial hardship shall include, but is not limited to, an analysis of the cost of compliance, the sources of available funds, and the shortfall between funds available and the cost of compliance. The transit agency must also specify the date and means by which compliance will be achieved in the request for a delay.

~~1956.2 (f)(5)~~ 2023(f) A transit agency that is unable to comply with an implementation deadline specified in section 2023.1 (e) (1), (2), (3), or (4) or Section 2023.2 (b)(1) or (2) because of the unavailability of technology may apply in writing no later than ninety (90) days prior to the applicable implementation deadline to the Executive Officer for an extension, for a time of up to, but not to exceed, one year. The applicant must demonstrate that the technology is unavailable; shall explain why the transit agency cannot comply by replacing older buses; and shall provide a schedule for compliance.

~~1956.2 (f)(7)~~ 2023(g) A transit agency that owns, operates, or leases fewer than 20 diesel-fueled, dual-fuel, bi-fuel, or diesel hybrid-electric buses in its ~~active transit~~ fleet and that operates in a federal one-hour ozone attainment area may delay implementation of the intermediate total diesel PM emission reduction requirements provided the transit agency complies with the implementation deadlines set forth in section 2023.1 paragraphs (e)(3)(A) or (e)(4) or section 2023.2 paragraph (b)(2).

Move section 1956.2 Fleet Rule for Transit Agencies to 2023.1 and modify:

2023.1 Fleet Rule for Transit Agencies – Urban Bus Requirements

(a) [No change]

~~(b)~~ [Moved to section 2023(a)]

~~(e)(b)~~ [No change]

~~(d)(c)~~ [No change to text, but note the following section was adopted by ARB on June 24, 2004, Board hearing]

(9) *The Executive Officer shall authorize, in writing, a transit agency on the diesel path to purchase one or more diesel-fueled hybrid-electric bus certified under title 13, CCR, section 1956.1 (a)(11)(B) provided that:*

(A) *The transit agency shall submit a mitigation plan and letter requesting approval by January 31st, 2005, to the Executive Officer that demonstrates that the transit agency will provide surplus emission reductions from urban buses in its fleet that will offset the NOx emission difference between the certified NOx emission standard of the hybrid-electric bus and 0.5 g/bhp-hr. The transit agency may not use NOx emission reductions that are otherwise required by any statute, regulation, or order or the emission reductions that will accrue from the retirement of an urban bus to be replaced by a hybrid-electric bus for the offset;*

(B) *The transit agency shall complete implementation of all mitigation measures set forth in the approved plan to offset NOx emissions prior to the receipt of the last diesel-fueled hybrid-electric bus; and*

(C) *The transit agency shall submit the reports required by section ~~1956.4~~ 2023.4(g).*

~~(e)~~(d) Beginning October 1, 2002 and beyond, no transit agency shall own, operate, or lease an active fleet of urban buses with average NOx emissions in excess of 4.8 g/bhp-hr, based on the engine certification standards of the engines in the active fleet.

(1) through (3) [No change]

(4) A transit agency established after October 1, 2002, shall not operate an active fleet of urban buses with an average NOx emission in excess of 4.0 g/bhp-hr or the NOx average of the active fleet of the transit agency from which it was formed, whichever is lower.

~~(f)~~(e) [No changes to (1) & (2)]

(3) No later than January 1, 2007:

(A) The diesel PM emission total for a transit agency on the diesel path shall be no more than 15 percent of its diesel PM emission total on January 1, 2002 or equal to 0.01 g/bhp-hr times the total number of diesel-fueled active fleet buses, whichever is greater.

(B) [No change]

- (4) No later than January 1, 2009, the diesel PM emissions total for a transit agency on the alternative path shall be no more than 15 percent of its diesel PM emission total on January 1, 2002 or equal to 0.01 g/bhp-hr times the total number of diesel-fueled active fleet buses, whichever is greater.
- ~~(5)~~ [Moved to section 2023(f)]
- ~~(5)~~ A new transit agency established January 1, 2005 or later shall not operate an active fleet of urban buses with a diesel PM emission total exceeding the following values:
 - (A) As of January 1, 2005, through December 31, 2009, 0.05 g/bhp-hr (exhaust emission value) times the total number of buses in the active fleet;
 - (B) As of January 1, 2010 and beyond, 0.01 g/bhp-hr (exhaust emission value) times the total number of buses in the active fleet.
- (6) [No change]
- ~~(7)~~ [Moved to section 2023(g)]
- ~~(8)~~ [Moved to section 2023(c)]
- ~~(9)~~ ~~(7)~~ [No change]
- ~~(g)~~ [moved to section 2023(e)]

Add Proposed New Requirements for Transit Fleet Vehicles Operated by Transit Agencies:

2023.2 Fleet Rule for Transit Agencies – Transit Fleet Vehicle Requirements

- (a) A transit agency shall not operate transit fleet vehicles with a NOx emission average, based on the engine certification standards of all transit fleet vehicles, exceeding the following values as of the specified dates. A transit agency shall provide documentation of compliance with the requirements in accordance with the provisions of subdivision (e)(2) of section 2023.4, title 13, CCR.
 - (1) Beginning December 31, 2007 through December 30, 2010, 3.2 g/bhp-hr;
 - (A) A transit agency may retire all 1997 and earlier model year transit fleet vehicles by December 31, 2007, to comply with the NOx fleet average requirement;

- (B) For a new transit agency established after January 1, 2007 and through December 31, 2009, either 3.2 g/bhp-hr or no higher than the NOx average of the transit fleet vehicles of the transit agency from which the new transit agency has been formed, whichever is lower.
- (2) Beginning December 31, 2010 and beyond, 2.4 g/bhp-hr;
- (A) A transit agency may retire all 2001 and earlier model year transit fleet vehicles by December 31, 2010, to comply with the NOx fleet average requirement.
- (B) For a new transit agency established after December 31, 2010, either 2.4 g/bhp-hr or no higher than the NOx average of the transit fleet vehicles of the transit agency from which the new transit agency has been formed, whichever is lower.
- (3) A zero-emission bus used to satisfy the requirements set forth in subdivision (d) of section 2023.1 may not be used to meet the requirements of this subdivision.
- (4) A transit agency may claim NOx emission reductions by application of a system that has been verified by the Executive Officer in accordance with section 2700 et seq., title 13, CCR, to comply with the fleet average requirement, in addition to transit fleet vehicle purchases, retirements, or engine repowering.
- (b) A transit agency shall reduce the total diesel PM emissions of its diesel transit fleet vehicles relative to its total diesel PM emissions from diesel transit fleet vehicles as of January 1, 2005, according to the schedule below. A transit agency shall calculate its diesel PM emission total for transit fleet vehicle by summing the PM engine certification standard, in grams per brake horsepower-hour (g/bhp-hr), for each transit fleet vehicle, as identified in the Executive Order for the specific engine and engine model year used in the transit fleet vehicle. For 1987 and earlier model year engines, the PM certification standard shall be deemed to be 1.0 g/bhp-hr. A transit agency shall provide documentation of compliance with these requirements in accordance with the provisions of subdivision (e)(3) of section 2023.4, title 13, CCR.
- (1) No later than December 31, 2007, the diesel PM emission total for a transit agency's transit fleet vehicle fleet shall be no more than 60 percent of its diesel PM emission total on January 1, 2005.
- (2) No later than December 31, 2010, the diesel PM emission total for a transit agency's transit fleet vehicle fleet shall be no more than 20 percent of its diesel PM emission total on January 1, 2005, or equal to

0.01 grams per brake horsepower-hour (g/bhp-hr) times the total number transit fleet vehicles in the current fleet, whichever is greater.

(3) A new transit agency established after January 1, 2005, may not have a diesel PM emission total exceeding the following values:

(A) For a new transit agency established January 1, 2005 through December 31, 2006, 0.1 g/bhp/hr (exhaust emission value) times the number of diesel-fueled transit fleet vehicles in its fleet. This value will serve as the transit agency's PM baseline and shall be reduced meeting the requirements set forth in section 2023.2(b)(1) and (2).

(B) For a new transit agency established January 1, 2007 through December 31, 2009, 0.1 g/bhp/hr (exhaust emission value) times the number of diesel-fueled transit fleet vehicles in its fleet. This value will serve as the transit agency's PM baseline and shall be reduced by 50 percent of the PM baseline by December 31, 2010, and 80 percent by December 31, 2012.

(C) For a new transit agency established January 1, 2010 and beyond, 0.01 g/bhp-hr (exhaust emission value) times the total number of diesel transit fleet vehicles in its fleet.

Move 1956.3 Zero-emission Bus Requirements to 2023.3

Move section 1956.4 Reporting Requirements for all Urban Bus Transit Agencies to 2023.4, and modify:

2023.4 Reporting Requirements for all ~~Urban~~ Bus Transit Agencies

- (a) The following reports on new urban bus purchases and/or leases by transit operators ~~agencies~~ on the alternative-fuel path shall be submitted as below:
- (1) [No change]
 - (2) [No change]
 - (3) Each transit agency shall submit an annual report containing: the number, manufacturer, make, and model year of engines, and fuel used for each ~~transit~~ urban bus it currently owns or operates, urban bus purchases and/or leases beginning January 1, 2000, and annual average percentage of total urban bus purchases and/or leases that were alternative-fuel buses. The first report shall be submitted by January 31, 2001. Subsequent reports shall be submitted annually by January 31 through the year 2016.

- (b) The following reports on new urban bus purchases and/or leases by transit operators ~~agencies~~ on the diesel path shall be submitted as below:
- (1) [No change]
 - (2) Each transit agency shall submit an annual report containing the number, manufacturer, make, and model year of engines, and fuel used for each ~~transit~~urban bus it currently owns or operates, and urban bus purchases and/or leases beginning January 1, 2000. The first report shall be submitted by January 31, 2001. Subsequent reports shall be submitted annually by January 31 through the year 2016.
 - (3) [No change]
- (c) Each transit agency shall submit the following reports on the urban bus NOx fleet average requirement: [rest of section - no change]
- (d) Each transit agency shall submit the following reports on the total PM emission requirement for urban buses: [rest of section - no change]
- (e) Each transit agency shall submit the following reports for its transit fleet vehicles:
- (1) An annual report of the number, manufacturer, make, and model year of engines, and fuel used for each transit fleet vehicle it currently owns, leases, or operates as of January 1st of each year, beginning in 2006. The first report shall be submitted by January 31, 2006, and subsequent reports shall be submitted annually by January 31 through the year 2016.
 - (2) For the NOx fleet average reduction requirements set forth in section 2023.2 (a):
 - (A) Initial documentation submitted by January 31, 2006, and contain, at a minimum, the transit vehicle fleet NOx emission average, and if that number exceeds the average required in subdivision (a)(1), section 2023.2, Title 13, CCR, a schedule of actions planned to achieve that average by December 31, 2007, including numbers and model years of bus purchases, retirements, retrofits, and/or repowerings, or shall indicate the intent of the transit agency to retire all model year 1997 and earlier buses in its fleet by December 31, 2007. If at any time between reporting periods changes occur that would change the compliance schedule or the transit agency meeting the requirements of section 2023.2(a), the transit agency must notify the Executive Officer immediately and submit an additional schedule within thirty (30) days.

- (B) A report submitted by January 31, 2008, detailing the transit fleet vehicle fleet NOx emission average as of December 31, 2007, or documenting the retirement of all model year 1997 and earlier transit fleet vehicle engines by January 31, 2007.
 - (C) Documentation submitted by January 31, 2009, and contain, at a minimum, the transit vehicle fleet NOx emission average, and if that number exceeds the average required in subdivision (a)(2), section 2023.2, Title 13, CCR, a schedule of actions planned to achieve that average by December 31, 2010, including numbers and model years of bus purchases, retirements, retrofits, and/or repowerings, or shall indicate the intent of the transit agency to retire all model year 2000 and earlier buses in its fleet by December 31, 2010. If at any time between reporting periods changes occur that would change the compliance schedule or the transit agency meeting the requirements of section 2023.2(a), the transit agency must notify the Executive Officer immediately and submit an additional schedule within thirty (30) days.
 - (D) A final report submitted by January 31, 2011 detailing the transit fleet vehicle fleet NOx emission average as of December 31, 2010, or documenting the retirement of all model year 2000 and earlier transit fleet vehicle engines by December 31, 2010.
- (3) For the total diesel PM reduction requirements set forth in section 2023.2 (b):
- (A) Initial documentation submitted by January 31, 2006, of the PM engine certification value of each transit fleet vehicle engine and the transit fleet vehicle diesel PM total as of January 1, 2005.
 - (B) A report submitted by January 31, 2008, of the transit fleet vehicle diesel PM total as of December 31, 2007, and the percentage diesel PM reduced, documenting compliance with the requirement in section 2023.2 (b)(1) of title 13, CCR.
 - (C) A final report submitted by January 31, 2011, of the transit fleet vehicle diesel PM total as of December 31, 2011, and the percentage diesel PM reduced, documenting compliance with the requirement in section 2023.2 (b)(2) of title 13, CCR.
 - (D) If a diesel emission control strategy has been applied to an engine, each report specified above must include the Diesel Emission Control Strategy Family Name in accordance with the requirements of section 2705 (g)(2), title 13, CCR; and the date of installation correlated to a specific transit fleet vehicle engine.

~~(e)~~(f) [No change]

~~(f)~~(g) [No change]

~~(g)~~(h) [No change]

~~(h)~~(i) *A transit agency requesting approval for the purchase of diesel-fueled hybrid-electric buses pursuant to paragraph (d)(9), section 1956.2, title 13, CCR, shall:*

- (1) submit an application for approval that meets the requirements of paragraphs (d)(9)(A) and (d)(9)(B), section 1956.2, title 13, CCR;*
- (2) include in the application all of the following: the number, manufacturer, make and model year of diesel-fueled hybrid-electric buses to be purchased; the schedule for the purchase and delivery of the buses; a detailed description of all measures that will be used to offset the excess NOx emissions including identification of the specific buses to which the measures will be applied, and the schedule for implementing those measures; and*
- (3) submit a final report to the Executive Officer within 30 days of receipt of the last diesel-fueled hybrid-electric bus that documents the schedule of delivery of the diesel-fueled hybrid-electric buses, timing, and completion of all measures to achieve the NOx offset.*

(i) A new transit agency shall submit the following information to the Executive Officer:

- (1) within 60 days of formation, the name of the new transit agency, its mailing address, name of a contact and that person's e-mail address and phone number; a description of the service area, and proposed routes; and the planned number of urban bus and transit fleet vehicles, including the model years of engines;
- (2) within 120 days of formation, its NOx fleet average for its active fleet and, separately, its transit fleet vehicles, and of its diesel PM emission total for its active fleet and, separately, its transit fleet vehicles.
- (3) Neither the NOx fleet average nor the diesel PM emission total for a new transit agency that is a successor to an existing transit agency may exceed the NOx fleet average or diesel PM emission total of the transit agency out of which it has been formed.